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REMARKS/ARGUMENTS

Claims 1-43 stand rejected in the outstanding Official Action. Claims 2, 16, 42 and 43 have been cancelled without prejudice and claims 1, 15 and 29 amended. Accordingly, claims 1, 3-15 and 17-41 are the only claims remaining in this application.

Claims 1-43 stand rejected under 35 USC §102 as anticipated by Swoboda (U.S. Patent 7,043,418).

In the Examiner's "Response to Arguments" portion of the Final Rejection, the Examiner provides a very helpful indication of his construction of the existing claims and suggestions as to clarifying the claim language, especially with respect to the Swoboda reference. Applicants have amended claim 1 to incorporate the subject matter of previously filed claim 42 (which was dependent from claim 1). Independent method claim 15 and trace data analyzing apparatus claim 29 have been similarly amended. Claim 1 has also been amended to indicate that the trace data formatter operation which is to selectively insert or not insert trace data source identifiers in the output data stream is "in dependence upon said change of trace data source."

In the last half of the second paragraph on page 17 of the Final Rejection, the Examiner indicates that he has broadly interpreted "trace data source identifier" and that in his view the "opcode" disclosed in Swoboda reads on such trace data source identifier. As will be discussed, the limitation from claim 42, i.e., that the formatter is operable to selectively insert or not insert said trace data source identifier, clearly distinguishes claim 1 from the Swoboda opcode because, as the Examiner admits in the second paragraph on page 18, "such Swoboda opcode is inserted at all times." The absence of any "selectivity" is confirmed by Swoboda in the sentence bridging columns 10 and 11 ("each encoded packet contains an opcode that indicates the type of

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information that is being sent"). Thus, if the Swoboda opcode is considered to be Applicants' claimed "trace data source identifier," Swoboda clearly teaches that this opcode must be included in each and every encoded packet and therefore would lead one of ordinary skill in the art away from Applicants' claim 42 limitation, i.e., "selectively insert or not insert said trace data source identifier."

It is Applicants' contention that one of ordinary skill in the art reading Applicants' independent claims 1, 15 and 29 would clearly understand the meaning of "trace data source identifier" to be the simple dictionary definition of these words, i.e., indicator of the source of trace data. As will be seen, it is clear that this cannot be the Swoboda "opcode." However, the addition of the claim 42 limitation to independent claim 1 clearly confirms the "selectivity" of the insert of trace data source identifier in the claim in direct contrast to the Swoboda disclosure which requires that the "Swoboda opcode is inserted at all times." (Final Rejection, page 18, lines 4-5).

Thus, Swoboda not only fails to disclose independent claims 1, 15 and 29, but it would actually lead one of ordinary skill in the art away from the claimed selectivity. Accordingly, there is believed no support for any further rejection of independent claims 1, 15 and 29 or claims dependent thereon.

Applicants have cancelled without prejudice dependent claims 2 and 16, as well as claims 42 and 43 which remove any potentially contradictory or duplicate claim language. In view of the fact that all three independent claims 1, 15 and 29 clearly claim the "selectively" inserting or not inserting trace data source identifier, they clearly distinguish over the Swoboda

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reference and any further rejection of the independent claims or claims dependent thereon over Swoboda is respectfully traversed.

Moreover, the Swoboda "opcode" is not the equivalent to Applicants' claimed "trace data source identifier." Not only does "opcode" not meet the ordinary definition of the phrase "trace data source identifier," but, in the discussion of Applicants' former claim 42 (now incorporated into claim 1), the Examiner has suggested that this is disclosed at column 11, lines 10-15 of Swoboda. However, the cited Swoboda passage describes a "continue packet" having a continue opcode as its two most significant bits. The Examiner suggests that the continue opcode is "inserted in place of a data source identifier or opcode when additional data needs to be transmitted in a subsequent packet." (See page 16, lines 10-12 of the Final Rejection).

However, the continue opcode in Swoboda is not inserted in place of a data source identifier, but instead the continue opcode is just one example of Swoboda opcode that is always included and which the Examiner contends is a counterpart to Applicants' claimed selectively inserted trace data source identifier. Reference may be had to Figure 3 of Swoboda which lists a plurality of different opcodes, with the continue opcode being only one of these various examples.

It is clear from Swoboda that the opcode is always inserted in a transmission packet because it is a requirement of the data format employed by the Swoboda system. This invariable insert requirement is alluded to by the Examiner's statement on page 18, second paragraph, that "such Swoboda opcode is inserted at all times" (emphasis added). Swoboda states at column 13, lines 41-48, that "in general, a given command in the composite stream will not be interrupted by packets of another command. Using the opcode information of Fig. 3, the trace

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packet decoder of Fig. 2 can, for example, easily separate PC trace commands from other commands” This passage confirms that the Swoboda opcodes are used as part of a data format to separate commands in a stream of transmission packets.

A simple review of the opcodes listed in the table of Figure 3 demonstrates that these opcodes are not intended to provide any “identifying” aspect of a source of trace data and instead include commands for such events as the repeat instruction, counter start, counterflow, etc. Even if the “continue opcode” were considered to be somehow different from the other opcodes, there is no indication of any information such as trace data source identifier which is contained in the opcode.

Additionally, Applicants’ claim specifies “inserting a trace data source identifier in said output trace data stream in response to a change of trace data source selected by said trace data selector.” There is no indication that Swoboda changes or inserts his “continue opcode” in “dependence upon said change of trace data source” as required in claim 1 (as amended by claim 42).

The system of Swoboda teaches that an opcode is output with every transmission packet and, as noted above, this is demonstrated in the Swoboda specification and is admitted to by the Examiner’s statements in the Final Rejection. The present invention provides a mechanism where the trace data source identifiers are selectively inserted or not inserted in dependence upon a change in the trace data source, rather than with every trace data packet. This improvement provides greater efficiency because a trace data analyzer can assume that the trace data source remains unchanged until a new trace data source identifier is encountered within the output trace data stream. This saves space within the output trace data streams, which often can be limited

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due to storage, bandwidth or other constraints. (See the benefit of the invention portion of the specification, page 3, lines 19-26).

Thus, amended claims 1, 15 and 29 clearly distinguish the Swoboda reference and, in fact, their "selectively insert or not insert" feature would be the direct opposite of Swoboda's teaching that opcode must be "inserted at all times."

Entry of Amendments Under Rule 116

Applicants respectfully suggest that entry of the above amendments to independent claims 1, 15 and 29 is appropriate under the provisions of Rule 116. These amendments basically include adding the "selectively inserting or not inserting" limitation from former claim 42, which was dependent on claim 1, into independent claims 1, 15 and 29. Therefore, this feature was previously searched in conjunction with previously submitted claim 42, as it was dependent from claim 1. Therefore, there can be no new issue requiring further consideration and/or search by this amendment.

Applicants have also added the limitation that the insertion of the trace data source identifier is performed "in dependence upon said change of trace data source" which further emphasizes that the selective insert is accomplished in dependence upon a change in data source. This interrelationship is implied if not literally included in the previously submitted language. However, Applicants have amended the independent claims in this fashion in response to the Examiner's suggestion that independent claims indicate specifically that "the 'trace data source identifier' refers to information relating to the identification of any trace data source" and this is accomplished by indicating that the selectivity is in dependence upon a change in the trace data source. The Examiner's suggestion is appreciated and Applicants' incorporation into the

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independent claims is believed to positively recite the limitation which would have been clearly obvious to those having ordinary skill in the art given the definition of "trace data source identifier."

Applicants have also cancelled claims 2, 16, 42 and 43 and have added no new claims. Moreover, in view of the distinctions noted by the Examiner in the Final Rejection, entry of this amendment would appear to obviate the need for any appeal of any remaining issue. Because no new issues are presented, no new claims are presented, no new matter is offered and the issues on appeal have been reduced (if not eliminated by allowance), entry of the above amendment pursuant to the provisions of 37 CFR 1.116 is believed appropriate.

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that remaining claims 1, 3-15 and 17-41 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

Respectfully submitted,

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